

ABSTRACT OF THE DISCLOSURE**METHOD AND APPARATUS FOR ENSURING VALID JOURNALED FILE
SYSTEM METADATA DURING A BACKUP OPERATION**

A method and apparatus for ensuring valid journaled file system metadata during a backup operation are provided. With the method and apparatus, mechanisms are provided for suspending write I/O operations to storage devices during a point-in-time backup operation. Once the point-in-time backup operation is completed, the suspended write I/O operations are released and may then be processed by the storage system. In one exemplary embodiment, when a point-in-time operation is initiated, a point-in-time backup flag is set in a logical volume manager. In response to receiving a write I/O operation, the logical volume manager checks the status of the point-in-time backup flag to determine if a point-in-time backup operation is currently being performed. If the flag is not set, then the write I/O operation is logged and performed in a normal manner. If the flag is set, then the write I/O operation is stored in a hold queue of the logical volume manager. The write I/O is not permitted to be sent to the storage system while stored in the hold queue. When the point-in-time backup operation is completed, the suspended write I/O operations in the hold queue are permitted to be sent to the storage system and the metadata for the file system is updated to reflect the committing of the write I/O operations.